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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/735,063

12/12/2003

Shalaby W. Shalaby

SHA-48

1267

29698 7590 05/11/2007

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EXAMINER

ISABELLA, DAVID J

ART UNIT	PAPER NUMBER
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3738

MAIL DATE	DELIVERY MODE
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05/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/735,063

Applicant(s)

SHALABY, SHALABY W.

Examiner

DAVID J. ISABELLA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 3,7-10,12-14,17 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,11,15,16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Status of the Claims

Claims 3,7-10,12-14,17 and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/6/2006.

Currently claims 1,2,4-6,11,15,16,18-20 are pending for consideration. Applicant argued that he failed to identify claim 5 as a claim readable on the elected species. This omission was made in error. Accordingly, claim 5 be has been reinstated for the present prosecution.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4-6,11,15,16,18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahtinen 2003/0059463 in view of either of Inoue et al [4670146] or Horowitz et al [3940377].

Lahtinen discloses the invention as claimed comprising a composite vascular construct with a first blood contacting (it is inherent that this is the inner surface of a graft as mentioned in section [0134]) component and a second tissue-contacting

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component (inherent that this is the outer surface of the stent or graft) comprising a load bearing textile construct ([0134 discusses textiles) having an activated, blood compatible surface, the second component comprising an absorbable construct for tissue in-growth, wherein at least one of the first and second components has at least transient occlusive properties [0031; 0054]; wherein the second component comprises a polypropylene fabric having a biomolecule immobilized on the blood contacting surface [0067]; wherein the second component can be an absorbable film (the coatings are equated to films) see [0112] including the biomolecules of polylysine, albumin and fibrinogen.

While Lahtinen is not specific to the process for rendering the surface of the polypropylene anionic for attaching specific biomolecules, each of Inoue et al and Horowitz et al teach methods for imparting a sulfonic group on the surface of the polymer base leaving the surface thereof anionic. It is well known in the art to use fuming sulfuric acid for attaching sulfonic groups onto the surfaces of various polymers including polypropylene. To use the well know method for attaching sulfonic groups onto the surfaces of polymers substrates to impart anionic charges to the surfaces would have been obvious to one with ordinary skill in the art from the teachings of either of Horwitz et al or Inoue et al.

Claim 2, see paragraph [0143].

Claim 3, see paragraph [0037].

Claim 5, see paragraph [0112]

Claim 6, see paragraphs [0113] and [0024].

Claim 11, see paragraph [0027].

Claim 15, see paragraph [0283].

Claim 16, see paragraph [0112].

Claim 18, see paragraph [0134].

Claims 19 and 20, see paragraphs [0111 and 0112].

Response to Arguments

Applicant's arguments filed 3/1/2007 have been fully considered but they are not persuasive. The claim has been amended to include the following limitation:

“basic molecules ionically bonded to the sulfonic groups and biomolecules ionically bonded to the basic molecules”

Applicant argues that the limitation requires that a basic molecule is ionically bound to the sulfonic groups and then to the biomolecule. Examiner does not agree with the scope of the claim as argued by applicant. The claim does not require the sequence of bonding as asserted by applicant. Accordingly, it is not clear how the claim, as broadly worded, distinguishes over the combination of Lahtinen 2003/0059463 and either of Inoue et al [4670146] or Horowitz et al [3940377] as applied supra. According to the rejection, while Lahtinen is not specific to the process for rendering the surface of the polypropylene anionic for attaching specific biomolecules, each of Inoue et al and Horowitz et al teach methods for imparting a sulfonic group on the surface of the polymer base leaving the surface thereof anionic. It is well known in the art to use fuming sulfuric acid for attaching sulfonic groups onto the surfaces of various polymers

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including polypropylene. To attach sulfonic groups onto the surfaces of polymers substrates to impart anionic charges to the surfaces would have been obvious to one with ordinary skill in the art from the teachings of either of Horwitz et al or Inoue et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID J. ISABELLA whose telephone number is 571-272-4749. The examiner can normally be reached on MONDAY-FRIDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CORRINE MCDERMOTT can be reached on 571-272-4754. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DAVID J. SABELLA
Primary Examiner
Art Unit 3738

DJI
5/3/2007